

**Single Family Design Guidelines Update/
Neighborhood Preservation Ordinance Update**

**ISSUE PAPER D
Part II**

Floor to Area Ratio (FAR) and Lot Coverage Calculation Considerations

The purpose of this issue paper is to:

- Clarify current City definitions of the elements that may play a role in calculating FARs or lot coverage.
- Reference how other jurisdictions define these elements and whether/how they consider them when calculating FARs and lot coverage.
- Provide recommendations for ordinance language changes and specific ways of calculating floor area and lot coverage.

FLOOR TO LOT AREA RATIOS

Background

At the June 25, 2004 meeting, the Steering Committee discussed the issue of gross and net methods of calculating square footage and tentatively approved the following definitions:

- **Net Floor Area**: The net floor area included within the surrounding exterior walls of a building or portion thereof, exclusive of the area occupied by the surrounding walls, vent shafts and courts, areas or structures used exclusively for parking. Floor area is exclusive of decks, balconies, attics, and basements that do not exceed a floor-to-ceiling-height of five (5) feet. Stairway and elevator shaft(s) areas are to be counted one time.
- **Gross Floor Area**: Square footage of all structures as measured from the outside of the exterior walls and includes all living spaces, garages, useable basements, cellars, and other accessory structures. Gross floor area is exclusive of decks, balconies, and attics that do not exceed a floor-to-ceiling-height of five (5) feet.
- **Floor to Area Ratio ("FAR")**: The ratio of gross floor area of all structures (except for special considerations of basements, excessive volumes beyond typical plate heights, understories, and cellars to be determined during FAR meeting discussions) on a parcel to total parcel area.

The following are often specially addressed by various jurisdictions within FAR calculations:

- Accessory buildings and structures
- Attics
- Balconies
- Basements
- Canopies
- Carports
- Cellars
- Decks
- Garages
- Interior courts
- Mechanical rooms
- Patios
- Porches
- Stairs
- Volume beyond typical plate heights

Of the above terms, the City's Zoning Ordinance defines:

- Accessory building
- Basement
- Cellar
- Garage

Accessory building: “A subordinate building or portion of the main building, the use of which is incidental to that of the main building on the same lot.” (Ord. 3710, 1974; Ord. 2585, 1957.)

Basement: “That portion of a building between floor and ceiling which is partly below and partly above grade (as defined in this chapter), and so located that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling. A basement shall be counted as a story.” (Ord. 3710, 1974; Ord. 3540, 1972.)

Cellar: “That portion of a building between floor and ceiling which is wholly or partly below grade (as defined in this chapter) but so located that the vertical distance from grade to the floor below is equal to or greater than the vertical distance from grade to ceiling. A cellar shall not be counted as a story if the vertical distance from grade to ceiling is four feet or less on all sides.” (Ord. 3710, 1974; Ord. 3540, 1972.)

Garage: “A building or portion of the building in which motor vehicles used by the occupants or tenants of the main building on the premises are stored or kept.” (Ord. 3710, 1974; Ord. 2585, 1957.)

Issues

Should FARs regulate actual and/or visual size?

FAR regulations may be used to regulate a structure’s actual floor area, and/or its apparent size. If the entire actual floor area is included in the regulations, then the floor area of underground cellars would be included in the ratio calculations. If the City adopts FARs, it should consider whether it is adopting the FARs based on a need to regulate the appearance of structures or the absolute size of structures. If it regulates the appearance of structures, the visual impact of a structure would determine which part of a project’s floor area would count toward its FAR calculation. Five feet appears to be a reasonable height at which to deem a structure visibly impactful. This issue paper assumes potential FAR regulations for the City of Santa Barbara would be based on measuring apparent rather than absolute size.

How to account for volume.

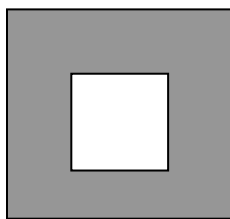
FARs are commonly used as an indicator of volume. However, FARs often do not directly account for plate height, an important component of a structure’s volume. Floor areas with excessive plate heights contribute more to a structure’s volume than a typical plate does. On the other hand, attics and basements may have a smaller than normal plate height and contribute relatively little to a structure’s apparent size. Part of a structure’s volume may also not be visible. It is probably not appropriate to include floor area below grade, such as portions of basements and cellars, in FAR calculations. Another element with special volume consideration is stairs. Stair floor area occupies the vertical range between the floor of one story and the floor of the story above, making floor area awkward to calculate.

How to account for unenclosed spaces.

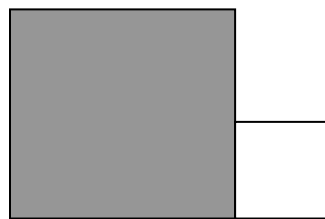
Unenclosed decks, porches, patios, carports and balconies are not always included in FAR determinations of because they are relatively two-dimensional features that do not add as much

apparent volume to a structure as would a covered structure with walls. However, uncovered, interior courtyards are akin to an additional, yet roofless, room in the middle of a building, and therefore contribute to a building's apparent size. Including interior courtyard square footage in FAR may be reasonable since they increase the exterior perimeter of a building.

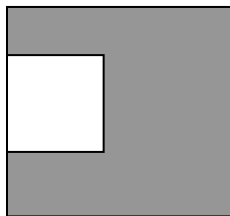
The diagrams below illustrate how the location of a courtyard relative to a building can affect the building's apparent volume. In the drawings, white areas represent courtyards and gray areas represent enclosed living space. Courtyards surrounded by an enclosed structure, as in the top left drawing, can be expected to contribute to a structure's apparent volume, whereas exterior courtyards, as in the top right drawing, will not necessarily do so significantly. The bottom two drawings show situations in which a courtyard may be interior or exterior depending on how it is defined. Wall height also affects a courtyard's visual impact.



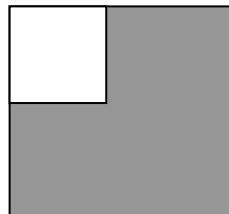
Interior



Exterior



?



?

How to account for uninhabited spaces.

Accessory structures, mechanical rooms, basements, attics, and other spaces that are not “habited” or “usable” do not always count toward FAR. Habitability is closely related to and often defined by height, so uninhabitable rooms are more likely to have a small apparent size. However, determining what makes a space usable or habitable can be difficult. Also, while rooms may be considered too short to be used as a habitable bedroom under normal circumstances, these spaces may be tall enough to significantly contribute to a project's volume.

Other Jurisdictions

The attached Table 7 shows how floor area is calculated in certain California jurisdictions. Note that jurisdictions often do not indicate in their Municipal Codes whether they include various elements when calculating floor area, perhaps because addressing so many details is difficult. Following is a description of other jurisdictions' calculation methods for specific elements and special volume considerations.

Accessory Structures/Covered Parking

The floor area of accessory structures on a lot, such as garages, is not always included in FAR calculations. The City of Santa Barbara's definition of "accessory" structures or buildings is similar to other jurisdictions' definitions. Not all jurisdictions define accessory buildings and accessory structures as being the same. The City of Santa Barbara has separate definitions for "building" and "structure," and both definitions are similar to those of other jurisdictions.

Building: *"Any structure having a roof supported by columns or walls for the shelter, housing, or enclosure of persons, animals, chattel,¹ or property of any kind."*

Structure: *"Anything constructed or erected and the use of which requires more or less permanent location on the ground or attachment to something having a permanent location on the ground."*

Most jurisdictions include accessory structures in floor area calculations but only if they fulfill certain criteria, such as being "enclosed," having a permanent foundation, or having more than a particular amount of square feet (120 square feet in the City of Pacific Grove and 400 square feet in the City of Moraga).

Attics, Basements & Cellars

In the City of Santa Barbara's definitions of "basement" and "cellar," a basement is mostly above grade, whereas a cellar is mostly below. This approach is taken by some other jurisdictions, but many count a structure mostly below grade (the definition of "cellar" in the City) as a "basement." Many jurisdictions do not define a structure mostly above grade as a "basement," and do count it toward floor area. City of Santa Barbara Staff almost always count structures mostly above grade toward floor area, including for NPO purposes. A general rule in other jurisdictions is that basements are not calculated toward floor area unless the height from grade to ceiling exceeds a certain measurement, ranging from two to five feet. Likewise, attics are usually not included in square footage totals unless they are a certain height or more (often seven or eight feet) or are habitable (which implies a minimum ceiling height).

In the City of Santa Barbara, Staff currently calculates basements with a ceiling height five feet above grade toward floor area. Currently, attic floor area is not counted if the attic cannot be accessed by a stairwell or a built-in ladder. Where attic floor area is accessible, only the part of the attic with a plate height more than five feet is counted.

Balconies, Decks, Patios, Porches & Loggias

There is no consistent means between jurisdictions for accounting for balconies, decks, patios and porches. Roughly half of the jurisdictions Staff has studied do not count these items at all. Of those jurisdictions that do, many specify enclosed patios or porches are included but often do not define "enclosed." The City of Claremont only includes porches and patios if they are covered, and the City of Los Gatos includes them only if they are used for ingress and egress.

¹Chattel: "An article of movable personal property." – www.dictionary.com

Concern has been expressed at Steering Committee meetings regarding loggias, defined in the Architectural Dictionary as follows.

“An arcaded or colonnaded porch or gallery attached to or contained within a larger structure; usually located in a prominent part of the building; open on at least one side to provide a protected outdoor sitting area, sometimes contains an upper story.”

The concern expressed is that loggias and large covered balconies, decks, patios, and porches can contribute significantly to the apparent volume of a structure, despite being unenclosed by walls.

Courts

The majority of jurisdictions do not specify in their zoning ordinances whether or how courts are to be included in FAR calculations. The City of Los Altos counts interior courts for FAR purposes. Although Los Altos does not explicitly exclude exterior courts from FAR, it does exclude:

“Ground floor balconies, porches, and other open structures (except carports) where at least one of the longest dimensions thereof is unenclosed and where the roof above is not an integral part of the house roof.” (14.02.070)

The Cities of Redondo Beach and Santa Monica exclude residential courts, regardless of whether they are enclosed, or completely surrounded by a building.

Stairs

Stairs are included when calculating FAR in the cities of Carpinteria, Los Altos, Palo Alto, Saratoga and Ventura. In the City of Pasadena, they are counted for each floor they occupy. In the Village of Wilmette, Illinois, stairs exceeding 6’6” to the top of the stair railing are counted at 50%. The City of Davis specifies:

“The floor area of each run of stairs shall be counted once (not twice by counting on two floor levels). Usable spaces (generally defined as having a 5’ minimum height) such as rooms, closets and cabinets under a run of stairs shall also be counted.”

The cities of Albany, Monterey Park and Santa Monica do not include stairs in FAR calculations. Santa Barbara County in general explicitly excludes stairs from its definition of net floor area, which it uses to calculate floor area ratio:

“Floor Area - Net: The gross floor area excluding vents, shafts, stairs, corridors, attics, and unenclosed porches and balconies.”

However, Summerland, in the County of Santa Barbara, counts interior stairs on one floor.

Volume Considerations

Calculating Volume

At the June 25 Steering Committee meeting, some members of the Committee and the public expressed interest in a three-dimensional volume calculation approach. At least two jurisdictions have attempted to measure volume, or at least an approximation of it.

- **Town of Woodside** instructs applicants to break up the footprint of a home into geometric shapes. The plate heights of the shapes are then measured, and the floor area of each shape is multiplied by a certain value depending on the plate height. Woodside's guidelines also describe how to count attics, basements, bay windows, garages, decks, dormers, eaves, fireplaces, stairwells, etc. An obvious disadvantage to this approach is the extremely complicated calculations applicants must perform and Staff must verify.
- **The City of Carmel** maintains several private architects on retainer who calculate each design review project's volume for an hourly rate and then provide the volume information to staff. The process costs single family residential applicants from \$200 to close to \$800 depending on the complexity of a project.

Excessive Plate Heights

A common way for jurisdictions to account for excessive plate heights is to double the floor area if a certain plate height is exceeded in order to account for especially large floors and their visual impact. Option 1A of "Volume Considerations" provides examples of what other jurisdictions consider to be an excessive plate height,

Eight feet appears to be a fairly standard plate height for single-family residential projects in the City of Santa Barbara, and ten feet or more is a taller than normal plate height.

Options

This section identifies FAR calculation method options for the elements described above. Each element may be always included in square-foot calculations or always excluded, or, for some elements, more complicated options are presented for Steering Committee consideration.

Accessory Structures/Covered Parking

Option #1: Include All Accessory Buildings, Including Covered Parking, Exceeding a Certain Height.

Accessory structures are often not counted toward FAR because they are not perceived as traditional living space, but they can have a significant impact on apparent size. If the intent of FAR requirements is to regulate the visual size of the structures on a lot, it is sensible to count all enclosed structures toward FAR.

Advantage: Attempts to include all structures visibly impacting the street and neighbors.

Disadvantage: May be perceived as too restrictive.

Option #2: Exclude All Accessory Buildings and Detached Covered Parking.

Advantage: Less cumbersome.

Disadvantage: May not include all structures with a significant visual impact.

Option #3: Include or Exclude a Different Combination of Accessory Buildings in Floor Area Calculations, as Crafted by Steering Committee Members.

Attics, Basements & Cellars

Option #1: Include All Attics, Basements and Cellars in FAR Calculations.

Advantage: Simple.

Disadvantage: Attics may have very low ceiling heights, and basements and cellars may be mostly below grade. Thus, some attics, basements or cellars that do not significantly contribute to a structure's apparent size may be counted.

Option #2: Exclude All Attics, Basements and Cellars from FAR Calculations.

Advantage: Simple.

Disadvantage: Attics, basements and cellars can function as and look like additional stories, depending on their height and portion above grade.

Option #3: Include Attics that Exceed a Certain Ceiling Height.

Advantage: Accounts for attics with a large visual impact.

Disadvantage: Different parts of attics can have very different heights, complicating how representative the plate height is of volume.

Option #4: Include Attics Accessible via a Stairwell or Built-In Ladder.

Advantage: Attics that can be accessed via a stairwell or built-in ladder are likely to be larger, taller and more usable than those that are not, and are thus more likely to increase apparent volume.

Disadvantage: Height may be more direct and appropriate for measuring volume than usability.

Option #5: Include Portions of Basements and Cellars Where the Ceiling-to-Grade Height Exceeds a Certain Measurement (e.g. five feet).

Advantage:

- Portions of basements and cellars above finished grade can contribute to volume, whereas portions below finished grade cannot, and this calculation takes that into account.

Disadvantages:

- Current complexities involved with natural and finished grade continue (see height discussion in Calculation Methods Issue Paper C).
- Ideally, height should be measured at all points, as is current required practice, but plan-checking for height at all points is not practical because it would be too time-consuming.

Option #6: Use Multipliers for FAR Calculations of Attics, Basements and/or Cellars.

Advantage: Acknowledges attics, basements and cellars are often not as sizable as regular stories but can still have a significant visual impact.

Disadvantage: Determining appropriate multipliers may be difficult.

Option #7: Steering Committee Crafted.

Balconies, Decks, Patios, Porches & Loggias

Option #1: Include All Balconies, Decks, Patios and Porches.

Advantage:

- Balconies, decks, patios, porches and loggias can be used as enclosed outdoor rooms that add to the living space of a home and contribute to the visible volume of a structure.

Disadvantages:

- These structures may have a relatively insignificant impact if they are small.
- May require definitions of balcony, deck, etc.

Option #2: Exclude All Balconies, Decks, Patios and Porches.

Advantage:

- Some balconies, decks, patios and porches can be open, uncovered and unenclosed, with little apparent volume.

Disadvantages:

- May require definitions of balcony, deck, etc.
- May exclude large structures that function as regular rooms.

Option #3: Include Loggias, ~~and~~ Covered Balconies, and Covered Upper Story Decks, ~~Patios and Porches.~~

- **Advantage:** Covered development features adds visual impact by defining a three-dimensional space.
- **Disadvantage:** The visual impact of a covered space is not the same as the visual impact of a enclosed space.

Option #4: Include Balconies, Decks, Patios and Porches Covered and Surrounded by Walls.

Advantage: Distinguishes between walled, usable structures that clearly appear as volume and relatively flat, open projections from a building.

Option #5: Use Multipliers for FAR Calculations of Balconies, Decks, Patios, Porches and Loggias.

For example, balconies, decks, porches and loggias could be counted at a 50% floor area rate. See advantages and disadvantages for Option #6 in the “Attics, Basements & Cellars” section above.

Option #6: Steering Committee Crafted.

Courtyards

Option #1: Include All Courtyards.

Advantage:

- Courtyards can be used as substantial outdoor living space, contributing to a structure’s apparent volume.

Disadvantages:

- Open, exterior courtyards with short walls are not as likely to contribute to a structure’s apparent size.
- Counting courtyards may indirectly discourage a traditional Spanish architectural feature in the City (e.g. on constrained lots or if strict FAR requirements are in place).

Option #2: Exclude All Courtyards.

Advantage: Courtyards are often a relatively small component of a project’s apparent size.

Disadvantage: Interior courtyards and attached courtyards with tall walls can significantly contribute to the apparent volume of a lot’s development.

Option #3: Include Interior Courtyards Only.

Advantage:

- Interior courtyards are the most likely to affect apparent size.

Disadvantages:

- Does not account for exterior/attached courtyards with tall walls.
- Defining “interior” courtyards is difficult.

Option #4: Include Courts with Walls at Least Five Feet in Height on at least 75 Percent of the Courtyard’s Perimeter.

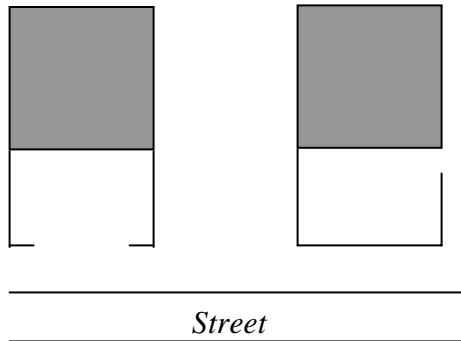
Advantage:

- Aims to count courts, interior or exterior, that are most likely to contribute substantially to a structure’s apparent volume.

Disadvantages:

- Creates no incentive to keep walls as close to five feet in height as possible; a 10-foot-wall affects FAR no more than a 6-foot-wall.

- Not all configurations meeting this standard and counted in the same manner would contribute to the apparent volume of a structure equally. For example, the courtyard below to the left is less visually impactful to the street than the courtyard to the right, but they would be counted the same under this option.



Option #5: Use Multipliers for FAR Calculations of Courtyards.

See advantages and disadvantages in Option #6 of the “attics, basements and cellars: section above.

Option #6: Steering Committee Crafted.

Stairs

Option #1: Count the Floor Area of Each Run of Stairs Once.

Using this method, only the floor area of steps’ and landings’ horizontal surface is counted. This counts the usable space of a staircase rather than approximating its volume.

Option #2: Count the Floor Area of Each Run of Stairs for Each Floor the Stairs Occupy.

Stairs can be considered multi-story structures and their floor area counted accordingly. This may more accurately reflect the volume a staircase contributes to a structure. For example, stairs leading to lofts within the same story would only be counted once, but stair area would count twice if spanning two stories. Stair area entering a basement would be included if the basement exceeds five feet above finished grade.

Option #3: Steering Committee Crafted.

Volume Considerations

Option #1: Multiply Floor Area by a Certain Number if Plate Height Is Excessive.

1A: Double the Floor Area If a Certain Plate Height Is Exceeded. The following table lists plate heights at which specified jurisdictions alter their FAR calculation methods. For example, the City of Los Altos doubles the square footage of stories with a plate height of 12 feet or greater. Other jurisdiction practices are illustrated in the table below.

Jurisdiction	Plate height	How square feet counted toward FAR
Los Altos	12+ feet	Doubled
Moraga	15+ feet	Doubled
Saratoga	15+ feet	Doubled
Pasadena	17+ feet	Doubled
Palo Alto	17+ feet 26+ feet	Doubled Tripled

Advantages:

- Simple way to account for excessive plate heights.
- Incentive to decrease building height and scale of homes.

Disadvantages:

- Could encourage less creative design if strict FARs are in place.
- Small changes in plate height could lead to a significant change in how floor area is calculated.

1B: Use a Multiplier for the Top Floor to Represent Different Roof Types.

Instead of Option 1A, different multipliers could apply to top floors for different roof types to account for different shapes. Gable and ridge roofs, for example, appear more voluminous than flat roofs. Where maximum plate height exceeds, for example, 15 feet, the square footage of the top floor could be calculated in a different manner for different roof types. Following is a two-step sample formula:

- 1) Determine the square footage of the top story exceeding the specified threshold excessive plate height (e.g. 15 feet).
- 2) Rather than doubling the square footage, multiply the square footage number from Step 1 as follows:
 - Flat roof: x 2
 - Mansard, gambrel or shed roofs: x 1.75
 - Gable, ridge or hipped roofs: x 1.5

Advantages:

- More fair because it more accurately calculates floor area based on a structure's visual impact.

- Creates incentives for more complex roof shapes that are usually more visually interesting and appropriate for residential neighborhoods.

Disadvantages:

- More complicated than a simple doubling of floor area where plate height exceeds 15 feet.
- Requires deciding upon more than one multiplier.
- Requires determining a proposed structure's roof shape. Some projects may have untraditional roof forms difficult to categorize.

Option #2: Measure the Three-Dimensional Volume of Structures.

Advantage: Probably the most accurate measure of a structure's volume.

Disadvantage: Would likely be difficult, time-consuming and costly to calculate.

Option #3: Steering Committee Crafted.

Recommendations

Recommendation #1: Staff recommends the following calculation methods for the specified elements.

Accessory Structures/Covered Parking

Option #1: Include All Accessory Buildings, Including Covered Parking, Exceeding a Certain Height (5').

Attics, Basements & Cellars

Option #3: Include Attics that Exceed a Certain Height (5').

Option #5: Include Basements and Cellars if the Ceiling-to-Grade Height Exceeds a Certain Measurement (5').

Balconies, Decks, Patios & Porches

Option #3: Include Loggias, ~~and~~ Covered Balconies, and Covered Upper Story Decks, Patios and Porches.

Option #4: Include Balconies, Decks, Patios and Porches Covered and Surrounded by Walls.

Courtyards

Option #4: Include all Courts with Walls of at Least Five Feet in Height on More than 75 Percent of the Perimeter.

Stairs

Option #2: Count the Floor Area of Each Run of Stairs for Each Floor it Occupies.

Volume Considerations

Option 1B: Use a Multiplier to Represent Different Roof Types.

Recommendation #2: Add the following definitions to the Municipal Code:

Attic: The area located above the ceiling of the top story and below the roof and not usable as habitable or commercial space. [similar to the City of Santa Monica]

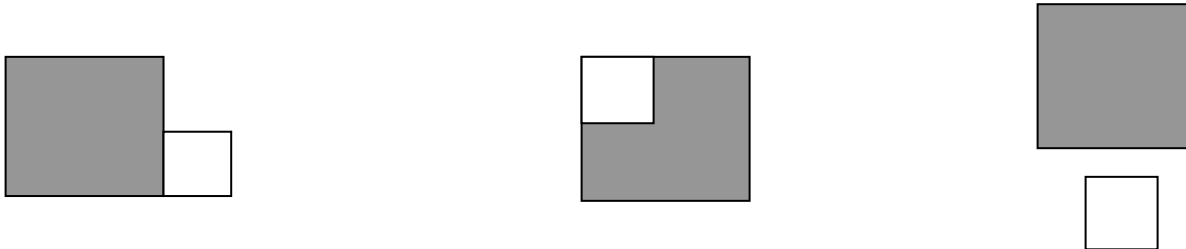
Note: This definition of attic departs from the current definition of attic used by the City of Santa Barbara staff. Currently, an “attic” can include habitable space if it is accessible by a ladder or stairway and has a plate height of more than five feet. This new definition would require such habitable spaces to be counted as another story, rather than as an “attic”.

Court: A defined uncovered space, bounded by walls over five feet in height for at least 75% of the perimeter of the space.

Court, Interior: A court, outside of required yard setbacks, bounded on three or more sides by the walls of a building or buildings. [similar to the City of Los Altos] Example illustrations:



Court, Exterior: A court outside of required yard setbacks, bounded on less than three sides by the exterior walls of a building. [similar to the City of Los Altos] Example illustrations:



Covered: Sheltered by a structure above such that less than 50% of the horizontal surface of the structure is open to permit the transmission of light and air. [similar to City of Claremont]

Enclosed: A space fully surrounded by solid exterior walls, pierced only by windows and customary entrance and exit doors. [similar to City of Lake Elsinore]

Lot Area, Net: The total area of a parcel, excluding recorded public right-of-way easements.

Recommendation #3: Revise net and gross definitions in the Municipal Code as follows:

Net Floor Area: The area within the surrounding exterior walls of a building,
including:

- each floor a stairway and elevator shaft(s) occupies.
- attics, cellars and basements that exceed a grade-to-ceiling height of five (5) feet

excluding:

- area occupied by exterior walls
- area or structures used exclusively for parking
- courts
- decks, balconies, patios and porches
- attics, cellars and basements that do not exceed a grade-to-ceiling height of five (5) feet

Gross Floor Area: The area inside and including exterior walls of a building,
including:

- area occupied by exterior walls
- area or structures used exclusively for covered parking
- interior courts
- exterior courts in the front yard
- loggias, covered balconies and covered upper-story decks
- enclosed decks, balconies, patios and porches
- each floor a stairway and elevator shaft(s) occupies
- attics, cellars and basements that exceed a grade-to-ceiling height of five (5) feet

excluding:

- balconies and decks that are neither covered nor enclosed
- unenclosed decks and balconies, covered or uncovered patios or porches
- uncovered decks, balconies, patios or porches
- attics, cellars and basements that do not exceed a grade-to-ceiling height of five (5) feet

Floor to Lot Area Ratio (“FAR”): The ratio of gross floor area of all structures on a parcel to net lot area.

Note: It was anticipated at the June 25th and August 16th Steering Committee meeting that this definition of FAR will likely become more complex to include special consideration of items such as considerations of basements, excessive volumes beyond typical plate heights, understories and cellars discussed in this Issue Paper.

Recommendation #4: As part of NPO Update implementation, update the development application project statistics form to reflect any new calculation methods.

LOT COVERAGE

Calculation Methods

Other jurisdictions typically take one of four approaches when deciding what to include in lot coverage calculations.

1. All buildings and structures.
2. Bird's eye view.
3. Human occupancy.
4. Space allocation.

Method #1: All Buildings and Structures.

Many jurisdictions define lot coverage using language similar to that of the City of Rancho Palos Verdes:

"Lot coverage means that portion of a lot or building site which is occupied by any building or structure." (17.02.040)

Most jurisdictions' definitions of lot coverage also provide examples of the types of buildings or structures to include. For example, pools and paved areas used for automobile access may be explicitly included or excluded. This approach to lot coverage may specify what to include, but often does not explain the reasoning behind it.

Method #2: Bird's Eye View.

The City of Del Mar defines "lot coverage" as:

"That percentage of a lot which, when viewed directly from above, would be covered by a structure or structures, or any part thereof..." (30.04.120)

This definition provides a literal interpretation of coverage and includes (in Del Mar) eaves, decks, and balconies. This approach also requires determining what is considered a structure for the sake of calculating lot coverage.

Method #3: Human Occupancy.

Some jurisdictions require parts of a lot to be habitable before including them in lot coverage calculations. This type of definition works to exclude buildings that are very short, such as small sheds, and structures such as trellises and unenclosed patios that are not likely to contribute much to the overall volume of the lot. The City of Duarte has a definition reading:

"The term "coverage" shall mean that portion of a lot or building site which is occupied by any building or structure for human occupancy." (19.08.118)

Method #4: Space Allocation.

The City of Thousand Oaks makes a distinction between structured coverage, paved areas, and open space, and then sets maximum or minimum percentages of each type of development depending on the density of units per net acre, as shown in the table below. In low-density residential neighborhoods, for example, no more than 40% of a lot can be covered by structures, no more than 15% can be covered by paved areas, and at least 40% must be open space. The City of Santa Barbara could develop similar standards based on zone district.

Thousand Oaks Lot Coverage Space Allocations				
	Structured Coverage	Paved Areas	Open Space	All Other Areas
Low density (0 to 4.5 units per net acre)	40%	15%	40%	5%
Medium density (4.5 to 15 units per net acre)	30%	20%	45%	5%
High density (15 to 30 units per net acre)	35%	25%	35%	5%

Recommendation

If the Steering Committee would like to consider lot coverage requirements, following is the recommended method for counting lot coverage.

Method #1: Include all buildings and structures in calculating lot coverage.

This method would include the following site elements in the square footage total to be divided by net lot size.

- Main building footprint
- Footprints of accessory buildings
- Balconies, porches, patios and decks
- Paved areas used for automobile access and parking
- Garages and carports
- Swimming pools, spas and decks
- All covered structures

To implement this calculation method, revising the Design Review Project Statistics Form may be necessary to expedite review. See the attached potential site improvements statistics form.

Attachments

Table 7: Floor Area Calculation Methods in Other Jurisdictions.

Definitions used by jurisdictions:

- 1) Floor area definitions
- 2) Lot/building coverage definitions

Design Review Project Statistics Form, draft.